Appl. No. 10/578,737

Amdt. dated May 19, 2010

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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-82. (Canceled)

83. (Previously Presented) A cold rolled steel sheet having aging resistance, comprising in weight %: 0.003 % or less of C; $0.005 \sim 0.03$ % of S; $0.01 \sim 0.1$ % of Al; 0.02 % or less of N; $0.03 \sim 0.2$ % of P; $0.05 \sim 0.2$ % of Mn; and the balance of Fe and other unavoidable impurities, wherein a composition of Mn and S satisfies the relationship: $0.58*Mn/S \le 10$, and wherein the steel sheet comprises precipitates of MnS having an average size of $0.2 \ \mu m$ or less.

84. (Canceled)

85. (Previously Presented) The steel sheet as set forth in claim 83, wherein the steel sheet comprises 0.004 % or less of N.

86. (Canceled)

- 87. (Previously Presented) The steel sheet as set forth in claim 83, further comprising at least one of $0.1 \sim 0.8$ % of Si and $0.2 \sim 1.2$ % of Cr.
- 88. (Previously Presented) The steel sheet as set forth in claim 83, wherein the steel sheet comprises $0.005 \sim 0.02$ % of N and $0.03 \sim 0.06$ % of P.
- 89. (Previously Presented) The steel sheet as set forth in claim 88, wherein the composition of Al and N satisfies the relationship: $1 \le 0.52*Al/N \le 5$.

- 90. (Previously Presented) The steel sheet as set forth in claim 83, further comprising $0.01 \sim 0.2$ % of Mo.
- 91. (Previously Presented) The steel sheet as set forth in claim 87, further comprising $0.01 \sim 0.2$ % of Mo.
- 92. (Previously Presented) The steel sheet as set forth in claim 83, further comprising $0.01 \sim 0.2\%$ of V.
- 93. (Previously Presented) The steel sheet as set forth claim 87, further comprising $0.01 \sim 0.2$ % of V.
- 94. (Previously Presented) The steel sheet as set forth in claim 91, further comprising $0.01 \sim 0.2\%$ of V.
- 95. (Previously Presented) A cold rolled steel sheet having aging resistance, comprising in weight %: $0.0005 \sim 0.003$ % of C; $0.003 \sim 0.025$ % of S; $0.01 \sim 0.08$ % of Al; 0.02 % or less of N; 0.2 % or less of P; $0.01 \sim 0.2$ % of Cu; and the balance of Fe and other unavoidable impurities, wherein a composition of Cu and S satisfies the relationship: $1 \le 0.5$ *Cu/S ≤ 10 , and wherein the steel sheet comprises precipitates of CuS having an average size of $0.1 \ \mu m$ or less.
- 96. (Previously Presented) The steel sheet as set forth in claim 95, wherein the steel sheet comprises 0.015 % or less of P.
- 97. (Previously Presented) The steel sheet as set forth in claim 95, wherein the steel sheet comprises 0.004 % or less of N.
- 98. (Previously Presented) The steel sheet as set forth in claim 95, wherein the composition of Cu and S satisfies the relationship: $1 \le 0.5$ *Cu/S ≤ 3 .

- 99. (Currently Amended) The steel sheet as set forth in claim 95, wherein the steel sheet comprises $0.03 \sim 0.2$ % or less of P.
- 100. (Previously Presented) The steel sheet as set forth in claim 95, further comprising at least one of $0.1 \sim 0.8$ % of Si and $0.2 \sim 1.2$ % of Cr.
- 101. (Previously Presented) The steel sheet as set forth in claim 95, wherein the steel sheet comprises $0.005 \sim 0.02$ % of N and $0.03 \sim 0.06$ % of P.
- 102. (Previously Presented) The steel sheet as set forth in claim 101, wherein the composition of Al and N satisfies the relationship: $1 \le 0.52*Al/N \le 5$.
- 103. (Previously Presented) The steel sheet as set forth in claim 95, further comprising $0.01 \sim 0.2$ % of Mo.
- 104. (Previously Presented) The steel sheet as set forth in claim 100, further comprising $0.01 \sim 0.2$ % of Mo.
- 105. (Previously Presented) The steel sheet as set forth in claim 95, further comprising $0.01 \sim 0.2\%$ of V.
- 106. (Previously Presented) The steel sheet as set forth claim 100, further comprising $0.01 \sim 0.2$ % of V.
- 107. (Previously Presented) The steel sheet as set forth in claim 104, further comprising $0.01 \sim 0.2\%$ of V.
- 108. (Previously Presented) A cold rolled steel sheet having aging resistance, comprising in weight %: $0.0005 \sim 0.003$ % of C; $0.003 \sim 0.025$ % of S; $0.01 \sim 0.08$ % of Al; 0.02 % or less of N; 0.2 % or less of P; $0.03 \sim 0.2$ % of Mn; $0.005 \sim 0.2$ % of Cu; and the balance of Fe and other unavoidable impurities, wherein a composition of Mn, Cu, and S satisfies the relationship: Mn+Cu ≤ 0.3 and

- 2 \leq 0.5*(Mn+Cu)/S \leq 20, and wherein the steel sheet includes precipitates of MnS, CuS, and (Mn, Cu)S having an average size of 0.2 μ m or less.
- 109. (Previously Presented) The steel sheet as set forth in claim 108, wherein the steel sheet comprises 0.015 % or less of P.
- 110. (Previously Presented) The steel sheet as set forth in claim 108, wherein the steel sheet comprises 0.004 % or less of N.
- 111. (Previously Presented) The steel sheet as set forth in claim 108, wherein the number of precipitates is 2x10⁶ or more.
- 112. (Previously Presented) The steel sheet as set forth in claim 108, wherein the composition of Mn, Cu and S satisfies the relationship: $2 \le 0.5*(Mn+Cu)/S \le 7$.
- 113. (Previously Presented) The steel sheet as set forth in claim 112, wherein the number of precipitates is $2x10^8$ or more.
- 114. (Currently Amended) The steel sheet as set forth in claim 112, wherein the steel sheet comprises $0.03 \sim 0.2$ % or less of P.
- 115. (Previously Presented) The steel sheet as set forth in claim 112, further comprising at least one of $0.1 \sim 0.8$ % of Si and $0.2 \sim 1.2$ % of Cr.
- 116. (Previously Presented) The steel sheet as set forth in claim 112, wherein the steel sheet comprises $0.005 \sim 0.02$ % of N and $0.03 \sim 0.06$ % of P.
- 117. (Previously Presented) The steel sheet as set forth in claim 116, wherein the composition of AI and N satisfies the relationship: $1 \le 0.52*AI/N \le 5$.
- 118. (Previously Presented) The steel sheet as set forth in claim 108, further comprising $0.01 \sim 0.2$ % of Mo.

- 119. (Previously Presented) The steel sheet as set forth in claim 115, further comprising $0.01 \sim 0.2$ % of V.
- 120. (Previously Presented) The steel sheet as set forth in claim 108, further comprising $0.01 \sim 0.2\%$ of V.
- 121. (Previously Presented) The steel sheet as set forth claim 115, further comprising $0.01 \sim 0.2$ % of V.
- 122. (Previously Presented) The steel sheet as set forth in claim 118, further comprising $0.01 \sim 0.2\%$ of V.
- 123. (Withdrawn) A method of manufacturing a cold rolled steel sheet having aging resistance and excellent formability, comprising the steps of: hot-rolling a steel slab with finish rolling at an Ar₃ transformation temperature or more to provide a hot rolled steel sheet, after reheating the steel slab to a temperature of 1,100 $^{\circ}$ C or more, the steel slab comprising in weight %: 0.003 % or less of C; 0.005 $^{\circ}$ 0.03 % of S; 0.01 $^{\circ}$ 0.1 % of Al; 0.02 % or less of N; 0.2 % or less of P; 0.05 $^{\circ}$ 0.2 % of Mn; and the balance of Fe and other unavoidable impurities, wherein a composition of Mn and S satisfies the relationship: 0.58*Mn/S≤10; cooling the steel sheet at a speed of 200 $^{\circ}$ C/min or more; coiling the cooled steel sheet at a temperature of 700 $^{\circ}$ C or less and then cold rolling the steel sheet; and continuous annealing the cold rolled steel sheet so as to obtain a cold rolled steel sheet comprising MnS precipitates having an average size of 0.2 µm or less.
- 124. (Withdrawn) The method as set forth in claim 123, wherein the steel slab comprises 0.015 % or less of P.
- 125. (Withdrawn) The method as set forth in claim 123, wherein the steel slab comprises 0.004 % or less of N.

- 126. (Withdrawn) The method as set forth in claim 123, wherein the steel slab comprises $0.03 \sim 0.2$ % of P.
- 127. (Withdrawn) The method as set forth in claim 123, wherein the steel slab further comprises at least one of $0.1 \sim 0.8$ % of Si and $0.2 \sim 1.2$ % of Cr.
- 128. (Withdrawn) The method as set forth in claim 123, wherein the steel slab comprises $0.005 \sim 0.02$ % of N and $0.03 \sim 0.06$ % of P.
- 129. (Withdrawn) The method as set forth in claim 128, wherein the composition of AI and N satisfies the relationship: $1 \le 0.52*AI/N \le 5$.
- 130. (Withdrawn) The method as set forth in claim 123, wherein the steel slab further comprises $0.01 \sim 0.2$ % of Mo.
- 131. (Withdrawn) The method as set forth in claim 127, wherein the steel slab further comprises $0.01 \sim 0.2$ % of Mo.
- 132. (Withdrawn) The method as set forth in claim 123, wherein the steel slab further comprises $0.01 \sim 0.2\%$ of V.
- 133. (Withdrawn) The method as set forth in claim 127, wherein the steel slab further comprises $0.01 \sim 0.2$ % of V.
- 134. (Withdrawn) The method as set forth in claim 131, wherein the steel slab further comprises $0.01 \sim 0.2\%$ of V.
- 135. (Withdrawn) A method of manufacturing a cold rolled steel sheet having aging resistance and excellent formability, comprising the steps of: hot-rolling a steel slab with finish rolling at an Ar_3 transformation temperature or more to provide a hot rolled steel sheet, after reheating the steel slab to a temperature of 1,100 $^{\circ}$ C or more, the steel slab comprising in weight %: 0.0005 \sim 0.003 % of C; 0.003 \sim 0.025 %

of S; 0.01 ~ 0.08 % of Al; 0.02 % or less of N; 0.2 % or less of P; 0.01 ~ 0.2 % of Cu; and the balance of Fe and other unavoidable impurities, wherein a composition of Cu and S satisfies the relationship: $1 \le 0.5 \text{ Cu/S} \le 10$; cooling the steel sheet at a speed of 300 °C/min; coiling the cooled steel sheet at a temperature of 700 °C or less and then cold rolling the wound steel sheet; and continuous annealing the cold rolled steel sheet so as to obtain a cold rolled steel sheet comprising CuS precipitates having an average size of 0.2 μ m or less.

- 136. (Withdrawn) The method as set forth in claim 135, wherein the steel slab comprises 0.015 % or less of P.
- 137. (Withdrawn) The method as set forth in claim 135, wherein the steel slab comprises 0.004 % or less of N.
- 138. (Withdrawn) The method as set forth in claim 135, wherein the composition of Cu and S satisfies the relationship: $1 \le 0.5$ *Cu/S ≤ 3 .
- 139. (Withdrawn) The method as set forth in claim 135, wherein the steel slab comprises $0.03 \sim 0.2$ % or less of P.
- 140. (Withdrawn) The method as set forth in claim 135, wherein the steel slab further comprises at least one of $0.1 \sim 0.8$ % of Si and $0.2 \sim 1.2$ % of Cr.
- 141. (Withdrawn) The method as set forth in claim 135, wherein the steel slab comprises $0.005 \sim 0.02$ % of N and $0.03 \sim 0.06$ % of P.
- 142. (Withdrawn) The method as set forth in claim 141, wherein the composition of Al and N satisfies the relationship: $1 \le 0.52*Al/N \le 5$.
- 143. (Withdrawn) The method as set forth in claim 135, wherein the steel slab further comprises $0.01 \sim 0.2$ % of Mo.

- 144. (Withdrawn) The method as set forth in claim 140, wherein the steel slab further comprises $0.01 \sim 0.2$ % of Mo.
- 145. (Withdrawn) The method as set forth in claim 135, wherein the steel slab further comprises $0.01 \sim 0.2\%$ of V.
- 146. (Withdrawn) The method as set forth in claim 143, further comprising $0.01 \sim 0.2$ % of V.
- 147. (Withdrawn) The method as set forth in claim 144, wherein the steel slab further comprises $0.01 \sim 0.2\%$ of V.
- 148. (Withdrawn) A method of manufacturing a cold rolled steel sheet having aging resistance and excellent formability, comprising the steps of: hot-rolling a steel slab with finish rolling at an Ar₃ transformation temperature or more to provide a hot rolled steel sheet, after reheating the steel slab to a temperature of 1,100 °C or more, the steel slab comprising in weight %: $0.0005 \sim 0.003$ % of C; $0.003 \sim 0.025$ % of S; $0.01 \sim 0.08$ % of Al; 0.02 % or less of N; 0.2 % or less of P; $0.03 \sim 0.2$ % of Mn; $0.005 \sim 0.2$ % of Cu; and the balance of Fe and other unavoidable impurities, wherein a composition of Mn, Cu, and S satisfies the relationships: Mn+Cu ≤ 0.3 and $0 \leq 0.5$ *(Mn+Cu)/S ≤ 20 ; cooling the steel sheet at a speed of 300 °C/min; coiling the cooled steel sheet at a temperature of 700 °C or less and then cold rolling the wound steel sheet; and continuous annealing the cold rolled steel sheet so as to obtain a cold rolled steel sheet comprising MnS, CuS, (Mn, Cu)S precipitates having an average size of 0.2 µm or less.
- 149. (Withdrawn) The method as set forth in claim 148, wherein the steel slab comprises 0.015 % or less of P.
- 150. (Withdrawn) The method as set forth in claim 148, wherein the steel slab comprises 0.004 % or less of N.

- 151. (Withdrawn) The method as set forth in claim 148, wherein the number of precipitates is $2x10^6$ or more.
- 152. (Withdrawn) The method as set forth in claim 148, wherein the composition of Mn, Cu and S satisfies the relationship: $2 \le 0.5*(Mn+Cu)/S \le 7$.
- 153. (Withdrawn) The method as set forth in claim 152, wherein the number of precipitates is $2x10^8$ or more.
- 154. (Withdrawn) The method as set forth in claim 148, wherein the steel slab comprises $0.03 \sim 0.2$ % or less of P.
- 155. (Withdrawn) The method as set forth in claim 148, wherein the steel slab further comprises at least one of $0.1 \sim 0.8$ % of Si and $0.2 \sim 1.2$ % of Cr.
- 156. (Withdrawn) The method as set forth in claim 148, wherein the steel slab comprises $0.005 \sim 0.02$ % of N and $0.03 \sim 0.06$ % of P.
- 157. (Withdrawn) The method as set forth in claim 156, wherein the composition of AI and N satisfies the relationship: $1 \le 0.52*AI/N \le 5$.
- 158. (Withdrawn) The method as set forth in claim 148, wherein the steel slab further comprises $0.01 \sim 0.2$ % of Mo.
- 159. (Withdrawn) The method as set forth in claim 155, wherein the steel slab further comprises $0.01 \sim 0.2$ % of Mo.
- 160. (Withdrawn) The method as set forth in claim 148, wherein the steel slab further comprises $0.01 \sim 0.2\%$ of V.
- 161. (Withdrawn) The method as set forth claim 155, wherein the steel slab further comprises $0.01 \sim 0.2$ % of V.

- 162. (Withdrawn) The method as set forth in claim 159, wherein the steel slab further comprises $0.01 \sim 0.2\%$ of V.
- 163. (Previously Presented) The steel sheet as set forth in claim 92, wherein the composition of V and C satisfies the relationship: $1 \le 0.25 \text{ V/C} \le 20$.
- 164. (Previously Presented) The steel sheet as set forth in claim 105, wherein the composition of V and C satisfies the relationship: $1 \le 0.25 \text{ V/C} \le 20$.
- 165. (Previously Presented) The steel sheet as set forth in claim 120, wherein the composition of V and C satisfies the relationship: $1 \le 0.25 \text{ V/C} \le 20$.
- 166. (Withdrawn) The method as set forth in claim 132, wherein the composition of V and C satisfies the relationship: $1 \le 0.25 \text{*V/C} \le 20$.
- 167. (Withdrawn) The method as set forth in claim 145, wherein the composition of V and C satisfies the relationship: $1 \le 0.25 \text{*V/C} \le 20$.
- 168. (Withdrawn) The method as set forth in claim 160, wherein the composition of V and C satisfies the relationship: $1 \le 0.25 \text{*V/C} \le 20$.